



Xerox® EX Print Server, Powered by Fiery®,
for the DocuColor® 8080 Digital Press

Fiery Graphic Arts Package



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CONTENTS

INTRODUCTION	7
Terminology and conventions	7
About this document	8
Fiery Graphic Arts Package, Premium Edition	9
Viewing the status of Fiery Graphic Arts Package	10
Viewing the status on Windows	10
Viewing the status on Mac OS X	11
Setting up your monitor and the monitor profile	12
PAPER SIMULATION WHITE POINT EDITING	13
Paper simulation workflow	13
Printing with default Paper Simulation	13
Paper Simulation print option	14
Paper Simulation White Point editing	14
Printing with custom paper simulation values	15
SPOT-ON WITH TWO-COLOR PRINT MAPPING	17
Setting up Two-Color Print Mapping	18
Printing a job with Two-Color Print Mapping	19
COLOR SETUP FEATURES	21
Control Bar	21
Control Bar workflow	22
Printing with the default Control Bar	22
Setting up a custom Control Bar	24
Printing with a custom Control Bar	24

Configurable Auto Trapping	25
Configurable Auto Trapping workflow	25
Printing with default Auto Trapping	25
Setting up configurable Auto Trapping	27
Printing with configurable Auto Trapping	27
Progressives	28
Progressives workflow	28
Printing with the default Progressives	29
Setting up Progressives	30
Printing with custom Progressives	30
Halftone Simulation	31
Halftone Simulation workflow	31
Halftone Simulation print option	31
Printing with pre-defined halftone screens	32
Setting up custom Halftone Simulation	33
Printing with custom halftone screens	33
Supported applications	34
Calibrating for custom halftone screens	34
SOFT PROOFING	37
IMAGEVIEWER	38
Accessing ImageViewer	38
PREFLIGHT	41
HOT FOLDERS FILTERS	42
POSTFLIGHT	43
About Postflight	44
Postflight Test Page	44
Postflight color-coded pages	44
Postflight reports	45




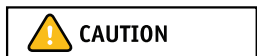

Postflight print option	47
Postflight workflow	47
Scenario 1: Diagnose an unexpected color	49
Scenario 2: Check the calibration status	51
Scenario 3: Check the quality of the output profile	52
Scenario 4: Diagnose a color problem of a specific object	53
MULTIPLE PLATE SEPARATIONS	54
Multiple plate separations workflow	54
Combine Separations print option	55
Supported applications	55
PAPER SIMULATION	56
Paper Simulation workflow	56
Paper Simulation print option	57
UGRA/FOGRA MEDIA WEDGE	58
Printing the Ugra/FOGRA Media Wedge	58
Reading the Ugra/FOGRA Media Wedge	59
Using the Ugra/FOGRA Media Wedge for quality control	59
INTEGRATED ALTONA VISUAL TEST	60
Altona Visual Test file	60
Interpreting test results	61
Using a PDF/X workflow not compatible with Altona	63
INDEX	65

INTRODUCTION

This document explains the Fiery Graphic Arts Package features and how they work. Because of the flexibility of the controls Fiery Graphic Arts Package provides, users in any environment can benefit from the Fiery Graphic Arts Package features. Novice users can use the default settings to obtain optimal results. Expert users with specific needs and requirements in graphic arts and other markets can also obtain optimal results by customizing the settings.

Terminology and conventions

The documentation for the Xerox EX Print Server, Powered by Fiery, for the DocuColor 8080 uses the following terminology and conventions.

Term or convention	Refers to
Aero	EX Print Server (in illustrations and examples)
Digital press	Xerox DocuColor 8080
EX Print Server	Xerox EX Print Server, Powered by Fiery, for the DocuColor 8080
Titles in <i>italics</i>	Other documents in this set
Windows	Microsoft Windows XP, Windows Vista, Windows Server 2003/2008/2008 R2, Windows 7
	Topics for which additional information is available by starting Help in the software
	Tips and information
	A warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the equipment safely, always pay attention to these warnings.
	A caution concerning operations that may lead to injury to persons if not performed correctly. To use the equipment safely, always pay attention to these cautions.
	Operational requirements and restrictions. Be sure to read these items carefully to operate the equipment correctly, and avoid damage to the equipment or property.

About this document

This document describes the features that are available through print options and utilities such as Command WorkStation. The features are organized as follows:

- Features accessible from Command WorkStation
 - **Paper Simulation White Point Editing** describes the white point editing feature.
 - **Spot-On with Two-Color Print Mapping** describes the feature used to map document colors with print colors.
 - **Color Setup** describes the following features: Control Bar, Auto Trapping, Progressives, and Halftone Simulation.
 - **Soft Proofing** describes the Soft Proof feature.
 - **ImageViewer** describes how to start the ImageViewer application.
 - **Preflight** describes how to perform the Preflight check of your job.
- Features accessible from utilities other than Command WorkStation
 - **Hot Folders Filters** describes the filters features.
- Other features
 - **Postflight** describes the Postflight feature and its workflow examples.
 - **Multiple Plate Separations** describes the combine separation feature for more than four plates.
 - **Paper Simulation** describes the fixed Paper Simulation feature.
 - **Ugra/FOGRA Media Wedge** describes the color test file called the Ugra/FOGRA Media Wedge.
 - **Integrated Altona Visual Test** describes the test integrated in the EX Print Server to check for PDF/X compatibility as tested by the Altona Test Suite.

Fiery Graphic Arts Package, Premium Edition

The following features are included in Fiery Graphic Arts Package, Premium Edition:

Feature	Where to set values or access	Print option name	See
Paper simulation white point editing	Command WorkStation: Paper Simulation	Paper Simulation	Paper Simulation White Point Editing
Spot-On: two-color print mapping	Command WorkStation: Spot-On	Two-Color Print Mapping	Spot-On with Two-Color Print Mapping
Control bar	Command WorkStation: Color Setup	Control Bar	Color Setup Features
Configurable auto trapping	Command WorkStation: Color Setup	Auto Trapping	Color Setup Features
Progressives	Command WorkStation: Color Setup	Progressives	Color Setup Features
Halftone screening	Command WorkStation: Color Setup	Halftone Simulation	Color Setup Features
Soft proofing	Command WorkStation: Preview		Soft Proofing
ImageViewer	Command WorkStation: ImageViewer		ImageViewer
Preflight	Command WorkStation: Preflight		Preflight
Hot Folders file filters	Hot Folders		Hot Folders filters
Postflight		Postflight	Postflight
Multiple plate separations		Combine Separation	Multiple Plate Separations
Fixed paper simulation		Paper Simulation	Paper Simulation
Ugra/FOGRA Media Wedge			Ugra/FOGRA Media Wedge
Integrated Altona Visual Test			Integrated Altona Visual Test

Viewing the status of Fiery Graphic Arts Package

You can view the status of the Fiery Graphic Arts Package, Premium Edition on your computer.

Viewing the status on Windows

Use the following procedure to view the status of Fiery Graphic Arts Package on a Windows computer.

NOTE: Before viewing the status on a Windows computer, you must install the printer driver. For information about installing the printer driver, see [Printing](#).

TO VIEW THE STATUS ON A WINDOWS COMPUTER

- 1 **Click Start and choose Printers (or Printers and Faxes).**
- 2 **Right-click the EX Print Server and choose Properties.**

The Properties dialog box appears.

- 3 **Click the Installable Options tab.**

Fiery Graphic Arts Package, Premium Edition appears in the Installed Options list.

NOTE: If you use the Point and Print method to install the printer driver and printer description file, you must enable Two-Way Communication on the monitor at the EX Print Server for each connection (print, hold, or direct) before you install them on your computer. For more information about Point and Print, see [Printing](#).

- 4 **Click OK to close the dialog box.**

Viewing the status on Mac OS X

Use one of the following procedures to view the status of Fiery Graphic Arts Package on a computer running Mac OS X.

NOTE: Before viewing the status on a computer running Mac OS X, install the printer driver. For information about installing the printer driver, see [Printing](#).

TO VIEW THE STATUS ON A COMPUTER RUNNING MAC OS X v10.5 AND v10.6

- 1 **Choose System Preferences from the Apple menu and then choose Print & Fax.**

The Print & Fax dialog box appears.

- 2 **In the Printer List, select the EX Print Server and click Options & Supplies.**

- 3 **Click the Driver tab.**

Fiery Graphic Arts Package, Premium Edition appears as the GA Package setting.

- 4 **Quit System Preferences.**

TO VIEW THE STATUS ON A COMPUTER RUNNING MAC OS X v10.4.x

- 1 **Start Printer Setup Utility.**

- 2 **Select the EX Print Server in the Printer List.**

- 3 **Choose Show Info from the Printer menu.**

The Printer Info dialog box appears.

- 4 **Choose Installable Options.**

Fiery Graphic Arts Package, Premium Edition appears as the GA Package setting.

- 5 **Close the dialog box.**

Setting up your monitor and the monitor profile

Some Fiery Graphic Arts Package features require that a job be displayed with correct colors on your monitor.

The following features require the correct monitor display:

- Paper Simulation White Point editing (see [page 13](#))
- ImageViewer previewing from Command WorkStation (see [page 38](#))

To display the colors correctly on your monitor, you must set up the monitor display according to the manufacturer's recommendations and specify the correct monitor profile for your monitor.

Specify the following settings for the monitor display:

- At the monitor: Brightness, Contrast, and Temperature
- From the control panel of the operating system: Resolution, Refresh rate, and Number of colors

For more information about setting up your monitor and the monitor profile, see the documentation that accompanies the monitor.

PAPER SIMULATION WHITE POINT EDITING

Although an ICC profile contains a definition of “white,” the white may not always visually match the human eye, requiring a perceptual adjustment. The Paper Simulation White Point editing feature allows you to perceptually adjust the hue, brightness, and saturation of the simulated paper white defined in the ICC profile.

Paper simulation workflow

You can print a job with the Paper Simulation feature set to On from the printer driver without customizing paper simulation. Many jobs may print satisfactorily with the fixed default Paper Simulation setting. However, you can customize the paper simulation by editing the white point values with Command WorkStation. After you customize the values, print the job with the custom paper simulation values from the printer driver by setting the Paper Simulation print option to On.

To print a job with the fixed Paper Simulation setting, use the procedure on [page 13](#). For more information about editing Paper Simulation White Point values and printing with custom paper simulation values, see [page 14](#).

Printing with default Paper Simulation

Use the following procedure to print a job with the fixed Paper Simulation value.

NOTE: The procedures for printing a job from a Mac OS or a Windows computer are similar.

TO PRINT A JOB WITH DEFAULT PAPER SIMULATION

- 1 **Choose Print from your application.**
- 2 **Select EX Print Server as your printer and click Properties.**
The Properties dialog box appears with the Fiery Printing tab selected.
- 3 **Click the Color icon.**
- 4 **Click Expert Settings.**
The Advanced Edit dialog box appears.
- 5 **Under the Color Input tab, select Paper Simulation.**
- 6 **Click OK to close the Advanced Edit dialog box.**
- 7 **Click OK to close the Properties dialog box.**
- 8 **Click Print.**

The job prints with the default Paper Simulation White Point setting.

Paper Simulation print option

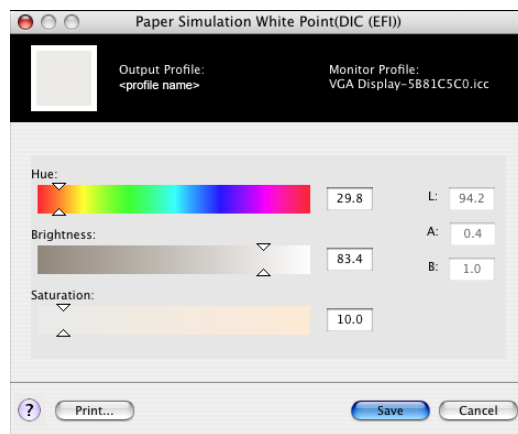
The following values are available for the Paper Simulation print option:

- Off (Default)
- On

NOTE: If you have not edited the Paper Simulation White Point values with Command WorkStation and selected On for this option, your job is printed with the default Paper Simulation values. If you edited the values, your job is printed with the custom Paper Simulation values.

Paper Simulation White Point editing

Your job may print satisfactorily with the fixed Paper Simulation setting. However, you can customize the Paper Simulation setting by editing the Paper Simulation White Point values with Command WorkStation.



NOTE: To display the colors correctly with your monitor, you must set the monitor and monitor settings correctly. For more information, see Command WorkStation Help.

To edit a custom profile, do the following:

- Select a CMYK Source Profile.
- Link the CMYK source profile to an output profile.



To access the Paper Simulation White Point dialog box, see the instructions in Command WorkStation Help.



NOTE: If Paper Simulation is set to On, and you have defined a substitute color as C=0, M=0, Y=0, K=0, the values defined in Substitute Colors override those for Paper Simulation. For information about Substitute Colors, see Command WorkStation Help.

Printing with custom paper simulation values

After you edit the paper simulation values in Command WorkStation, you can print a document with the custom paper simulation values from the printer driver. You can also override the setting in Job Properties.

NOTE: The procedures for printing a job from a Windows or Mac OS computer are fundamentally the same. The following procedure uses illustrations from a Mac OS computer.

Use the following procedure to print a job with the custom paper simulation values.

TO PRINT A JOB WITH EDITED PAPER SIMULATION VALUES

1 Choose Print in your application.

The print dialog box appears.

2 Mac OS X v10.5 and v10.6: Expand the dialog box, if necessary, by clicking the arrow next to the Printer name.

3 Mac OS X v10.3.9 and 10.4.x: Click Copies & Pages, choose ColorSync from the drop-down list, and then choose In Printer from the Color Conversion list.

Mac OS X v10.5 and v10.6: Click Preview, choose Color Matching from the drop-down list, and then select In Printer.

4 Choose Fiery Features from the drop-down list.

5 Select Two-Way Communication.



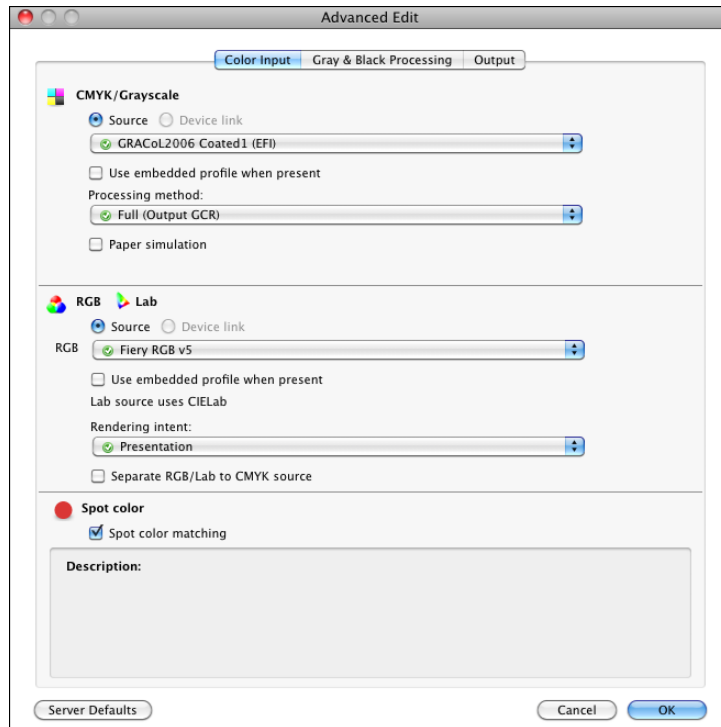
For information about enabling Two-Way Communication, see printer driver Help.

6 Click Full Properties, and then click the Color icon.

The Color pane appears.

7 Click Expert Settings.

The Advanced Edit dialog box appears.



8 Under the Color Input tab, select the following settings.

- Choose the custom profile from the CMYK/Grayscale Source list. Choose the profile you saved after editing the Paper Simulation White Point values.
- Select Full (Output GCR) for the CMYK/Grayscale Processing Method option.
- Select Paper Simulation.

9 Under the Output tab, choose the output profile that you linked to the custom CMYK Source profile from the Output Profile list.

10 Click OK.

The Color pane reappears.

11 Click OK, and then click Print.

The job is printed using your custom CMYK Source profile with the edited White Point values.

SPOT-ON WITH TWO-COLOR PRINT MAPPING

In addition to managing “named” colors, the Spot-On spot color editor in Command WorkStation allows you to assign spot colors and process colors to the generic colors that are used in a job. The Two-Color Print Mapping feature is designed for print shop operators to do the proofing for a two-color press. You can print a two-color job to a two-color device by mapping the colors in a job to the colors that are already created on the device.



For information about managing named colors with Spot-On, see Command WorkStation Help.

NOTE: The RGB colors in a document are first converted to CMYK colors and then the Two-Color Print Mapping is applied.

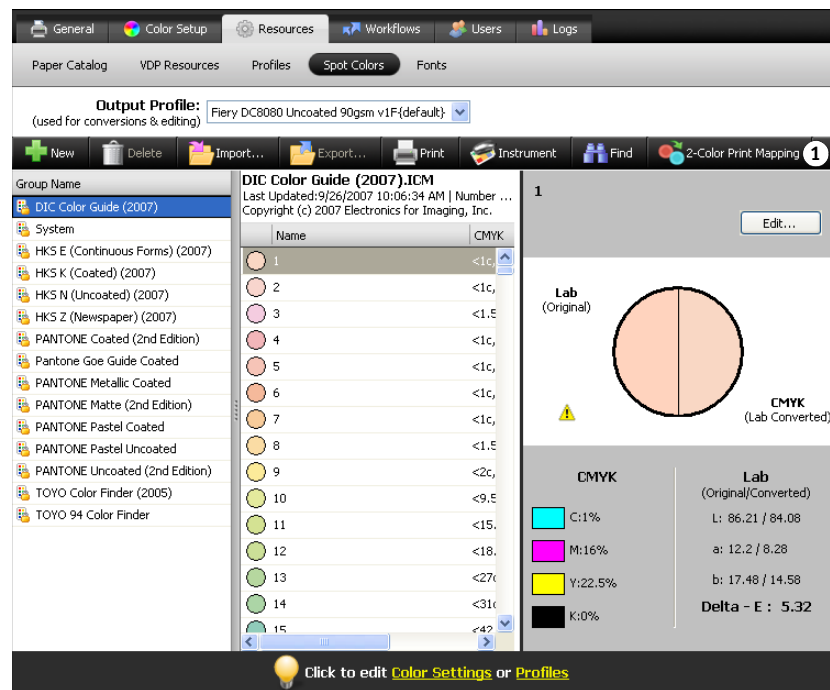
The following limitations apply when you use the Two-Color Print Mapping feature:

- The settings for Two-Color Print Mapping are ignored when the Composite Overprint and Combine Separation features are enabled.
- Postflight does not report on Two-Color Print Mapping, because Postflight reports the source state of a document. The color space that the digital press receives before any conversions is reported in Postflight.
- You cannot select the Two-Color Print Mapping and Substitute Color options at the same time. Also, you cannot select a substitute color to be used in the Two-Color Print Mapping feature.

Setting up Two-Color Print Mapping

In the Two-Color Print Mapping feature, the colors that are used in a job are mapped with the colors to print. From Spot-On, open the Define 2-Color Print Mapping window and then reassign the document colors to the named or custom colors to print with.

- 1 Click to open the Define 2-Color Print Mapping window



When the Two-Color Print Mapping print option is enabled for a job, EX Print Server replaces the document colors with the colors you defined in the Define 2-Color Print Mapping window.



To define the color mappings in the Define 2-Color Print Mapping window, see the instructions in Command WorkStation Help.

Printing a job with Two-Color Print Mapping

After you map the colors in the Define 2-Color Print Mapping window in Spot-On, you can print a two-color job from the printer driver. You can also override the print option setting using Command WorkStation Job Properties.

NOTE: When you print a job, select the same output profile from the printer driver as you selected when you set up Two-Color Print Mapping in Spot-On. Otherwise, print mappings that are defined in Spot-On have no effect.

NOTE: The procedures for printing a job from a Mac OS and a Windows computer are similar.

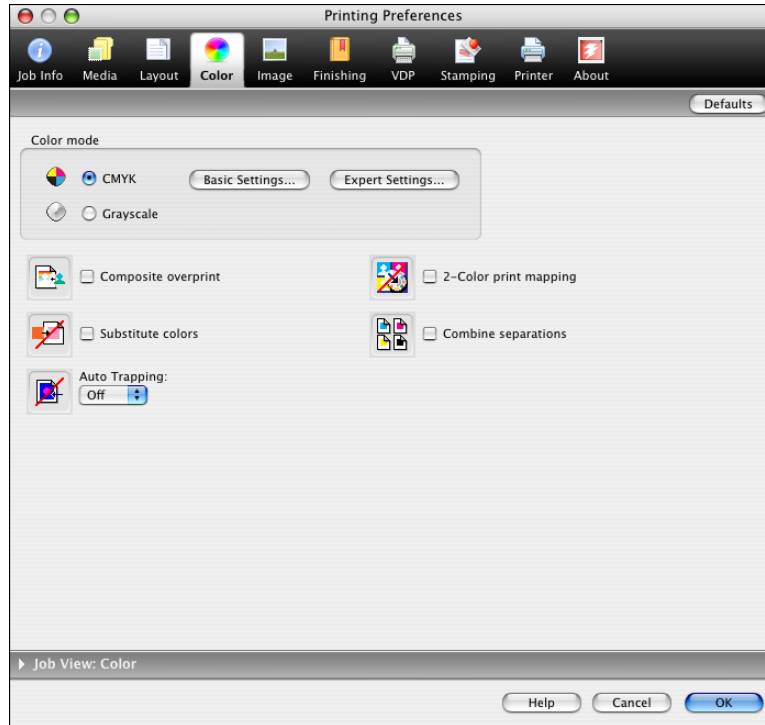
TO PRINT A TWO-COLOR JOB

- 1 **Open a document in your application.**
- 2 **Choose Print.**
- 3 **Mac OS X v10.5 and v10.6:** Expand the dialog box, if necessary, by clicking the arrow next to the Printer name.
- 4 **Mac OS X v10.3.9 and 10.4.x:** Click Copiers & Pages and choose Fiery Features from the drop-down list.

Mac OS X v10.5 and v10.6: Click Preview and choose Fiery Features from the drop-down list.

5 Click Full Properties, and then click the Color icon.

The Color pane appears.



6 Select 2-Color print mapping.

7 Click OK and then click Print.

The job is printed with the mapping you defined in Spot-On.

COLOR SETUP FEATURES

With Fiery Graphic Arts Package, Premium Edition, Color Setup in Command WorkStation offers the following customizable features:

- Control Bar (see [page 21](#))
- Auto Trapping (see [page 25](#))
- Progressives (see [page 28](#))
- Halftone Simulation (see [page 31](#))



For information about Color Setup, see Command WorkStation Help.

Control Bar

Control Bar allows you to add a static color bar and dynamic job information to each printed page at a user-defined location. The feature can be set as a server default or overridden on a per-job basis.

The default Control Bar is designed to fit the EX Print Server default paper size, Letter/A4, or larger. You can create Control Bars for other paper sizes.

NOTE: If a Control Bar does not fit on the page, it will be clipped.

NOTE: If a background color is defined as “white” for a user-defined Control Bar, it must be defined in the CMYK color space for the Paper Simulation feature to take effect. For more information about Paper Simulation, see [page 13](#).

Control Bar workflow

The default Control Bar provides a color bar and dynamic job information. Print a job with the default Control Bar by setting the Control Bar print option to On from the printer driver. Many jobs print satisfactorily with the default Control Bar, but if you require your own color bars, create them by defining custom values in the Control Bar Definition dialog box. After you define a custom Control Bar in the Control Bar pane in Color Setup, you can print a job with the custom Control Bar from the printer driver.

To print a job with the default Control Bar, see the following section. To print a job with a custom Control Bar, see [page 24](#).

Printing with the default Control Bar

Print a job with the default Control Bar by setting the Control Bar print option to On from the printer driver.

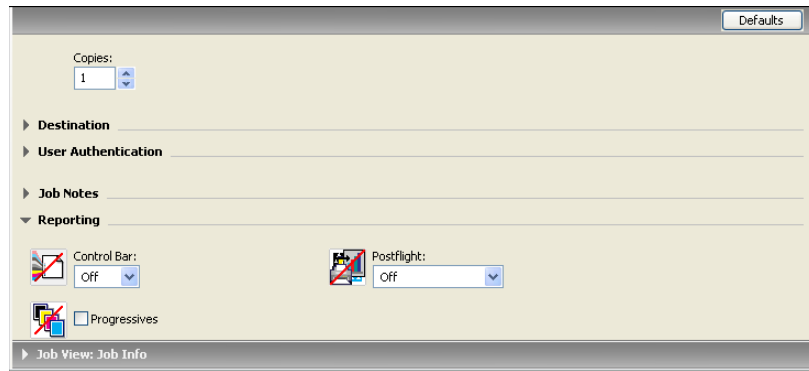
TO PRINT A JOB WITH THE DEFAULT CONTROL BAR

- 1 **Choose Print from your application.**
- 2 **Select EX Print Server as your printer and click Properties.**

The Properties dialog box appears, with the Fiery Printing tab selected.

- 3 **Click the Job Info icon.**

- 4 Under Reporting, select On for the Control Bar print option.



- 5 Click OK.

- 6 Click Print.

The job is printed with the default Control Bar.

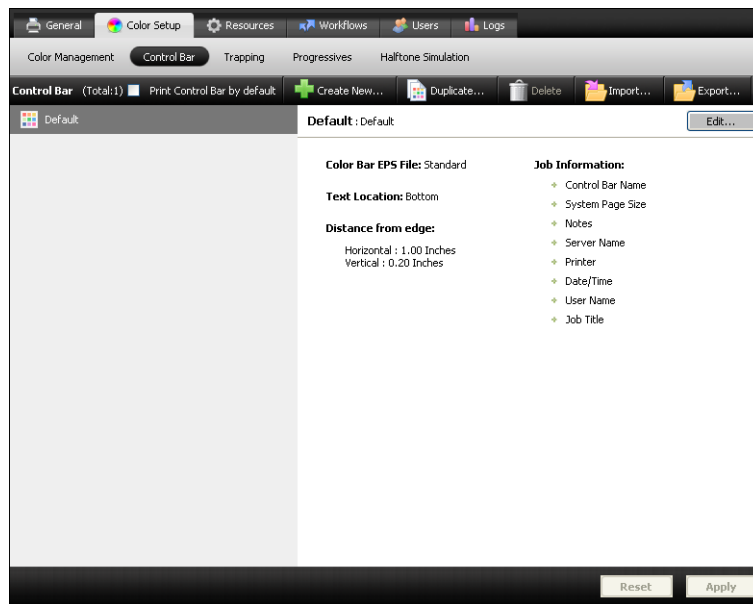
- 1 Static color bar
- 2 Job information



Setting up a custom Control Bar



The custom Control Bar feature is in the Control Bar tab under the Color Setup tab in the Device Center. For more information about using Control Bar, see Command WorkStation Help.



Printing with a custom Control Bar

The procedure to print a job with a custom Control Bar is basically the same as to print with the default Control Bar (see [page 22](#)). Use the following procedure to print with a custom Control Bar.

TO PRINT A JOB WITH A CUSTOM CONTROL BAR

- 1 **Choose Print from your application.**
- 2 **Select EX Print Server as your printer and click Properties.**
The Properties dialog box appears with the Fiery Printing tab selected.
- 3 **Click the Job Info icon.**
- 4 **Select On for the Control Bar print option.**
- 5 **Click OK.**
- 6 **Click Print.**

The job is printed with the Control Bar specified in the Control Bar Definition dialog box.

Configurable Auto Trapping

Trapping is a technique where some objects are printed slightly larger or smaller than you have specified in an application, in order to prevent white edges around the objects. These white edges, or “halos,” can be caused by factors such as misregistration, the physical properties of the dry inks, and the stiffness of the media.

The configurable Auto Trapping feature provides you with advanced trapping settings and gives you full control over their values. The EX Print Server is shipped with values that are optimized for the print device using regular paper, but if these values do not provide the results necessary for the media that you use, modify the values to meet your requirements.

Configurable Auto Trapping workflow

The fixed values are set as default for Auto Trapping. The EX Print Server applies these fixed values when you set Auto Trapping to On, with generally good results. However, to customize the values for Auto Trapping, define the values in the Auto Trapping pane in Color Setup. After you define the values, print a job with Auto Trapping set to On from the printer driver.

Printing with default Auto Trapping

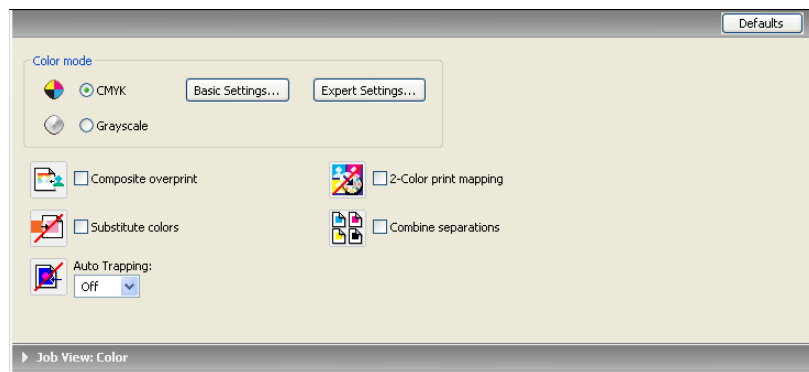
You can print a job with default Auto Trapping by setting the Auto Trapping print option to On from the printer driver.

TO PRINT A JOB WITH DEFAULT AUTO TRAPPING

- 1 Choose Print from your application.**
- 2 Select EX Print Server as your printer and click Properties.**

The Properties dialog box appears with the Fiery Printing tab selected.

- 3 Click the Color icon.**



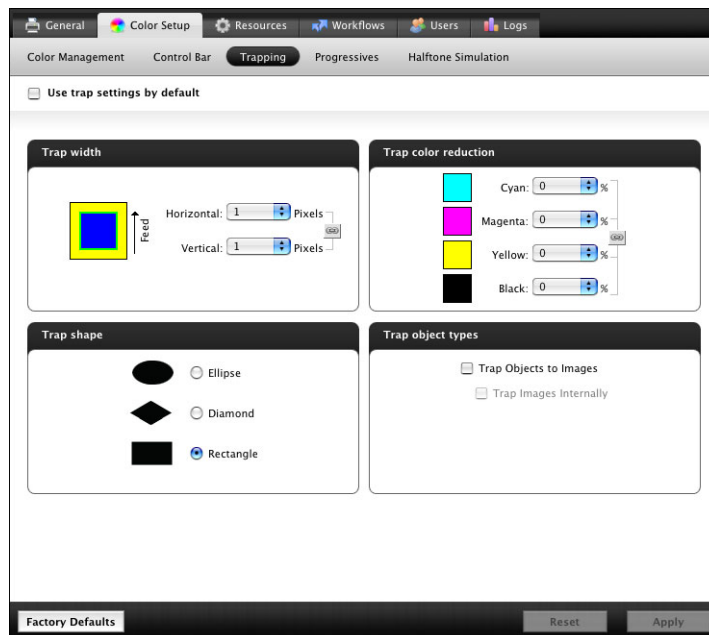
- 4 Select On for the Auto Trapping print option.**
- 5 Click OK.**
- 6 Click Print.**

The job is printed with the default Auto Trapping values.

Setting up configurable Auto Trapping



In Command WorkStation, the configurable Auto Trapping feature is in the Trapping tab under the Color Setup tab in Device Center. For more information about using Trapping, see Command WorkStation Help.



Printing with configurable Auto Trapping

After you define the Auto Trapping values, print a job with the Auto Trapping feature by setting the Auto Trapping print option to On from the printer driver. You can also change the setting for this print option in a job using Command WorkStation Job Properties.

NOTE: If the Auto Trapping values are changed, reRIPping is required to print a job with the new values.

Use the procedure on [page 22](#) to print a job with custom Auto Trapping values from the printer driver. The job is printed with the Auto Trapping values defined in the Auto Trapping pane.

Progressives

The term “Progressives” refers to printing variations in a multi-color document. The variations may use from one to all of the available color channels in a print device. The majority of printing processes that involve more than one or two colorants apply the colorants sequentially. Traditionally, progressives are the intermediate states after some and before all colorants have been applied. The Progressives feature is more flexible, because it allows you to select which color is printed, using up to four sheets per original document page.

NOTE: The Progressives feature is designed to show you the dry ink separations used by the job on the print device. The feature is not intended to be used to proof for another non-Fiery driven print device.

NOTE: Progressives show the separations that the EX Print Server sends to the print device, not the separations contained in the job source file.

NOTE: Progressives is a “reporting” feature. It is not designed to be used with production features such as VDP and Imposition. Progressives is offered for diagnostic situations. With high volume applications or production environments, use Progressives only on the individual pages that need testing.

Progressives workflow

You can inspect the result of each channel with the default values for color channels in Progressives. However, if you must customize the selection of color channels or number of sheets to print, you can do so by specifying the color channels in the Progressives pane in Color Setup. After specifying the color channels, print a job with the customized Progressives by setting the print option to On from the printer driver.

NOTE: You cannot use the Progressives and Postflight features at the same time. A constraint is set for these print options from the printer driver.

NOTE: Clearing plates in ImageViewer does not have an effect on a Progressives job printed from ImageViewer. It prints with the values specified in the Progressives pane. For more information, see [“ImageViewer”](#) on page 38.

Printing with the default Progressives

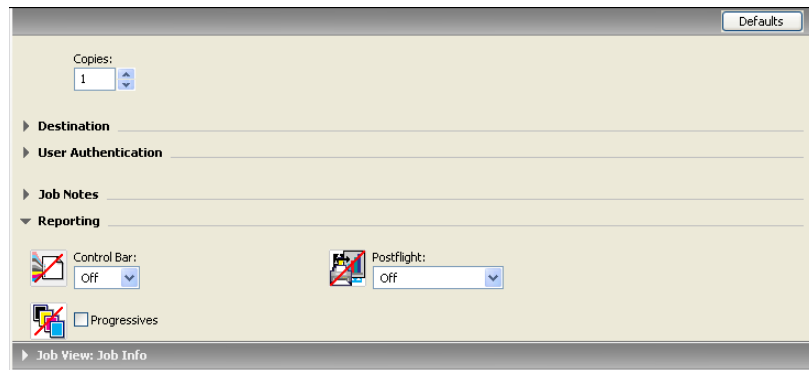
Print a job with the default Progressives by setting the Progressives print option to On from the printer driver.

TO PRINT A JOB WITH THE DEFAULT PROGRESSIVES

- 1 Choose Print from your application.
- 2 Select EX Print Server as your printer and click Properties.

The Properties dialog box appears with the Fiery Printing tab selected.

- 3 Click the Job Info icon.
- 4 Select Progressives.



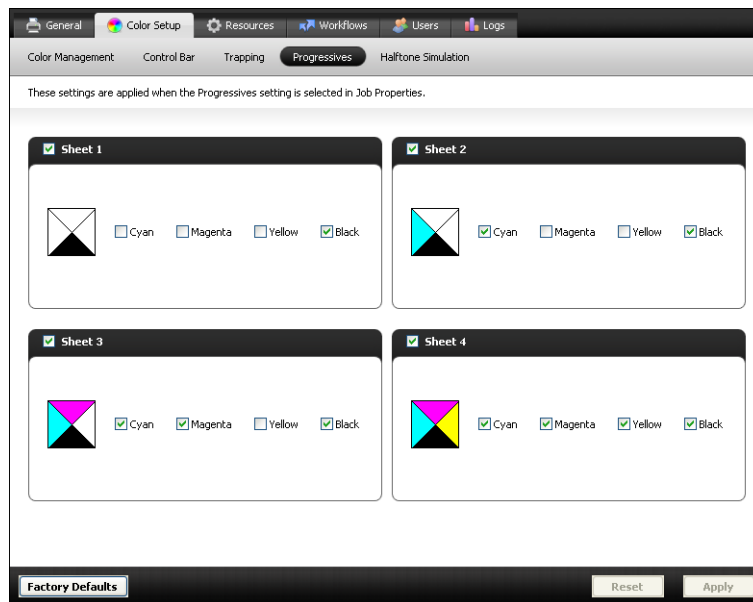
- 5 Click OK.
- 6 Click Print.

The job is printed with the default Progressives.

Setting up Progressives



The Progressives feature is in the Progressives tab under the Color Setup tab in the Device Center. For more information about setting up custom Progressives, see Command WorkStation Help.



Printing with custom Progressives

After specifying the color channels, print a job with custom Progressives by setting the Progressives print option to On from the printer driver.

NOTE: Alternatively, you can send a job with the default Progressives setting and change the print option setting using Command WorkStation Job Properties.

Use the same procedure on [page 29](#) to print a job with the Progressives option from the printer driver. The printed job reflects the Progressives settings you defined in the Progressives pane.

Halftone Simulation

When proofing, we recommend that you print in contone mode, which uses the best color in the Fiery system. For advanced proofing purposes, Fiery Graphic Arts Package offers user-controlled halftone generation. Halftoned proofs simulate, with reasonable accuracy, the final dots imaged on films or plates for offset printing. The halftone screening feature allows you to define the custom screening functions applied to your print job.

Halftone Simulation workflow

You can select pre-set halftone screens to print jobs with good results. When you must customize the values for a halftone screen, define a custom halftone in your application or in Command WorkStation, and then select the screen in the Halftone Simulation print option from the printer driver.



For information about the print option and the procedure to print with the pre-defined halftone screens, see the following section. For information about the Halftone Simulation pane and the procedure to specify custom halftone screen values, see Command WorkStation Help.

Halftone Simulation print option

Access the halftone screening feature through the Halftone Simulation print option. Select from the following option items:

- **Application Defined:** Uses a pre-defined halftone screen specified in an application. For information about the supported applications, see [page 34](#).
- **Newsprint:** Uses a pre-defined halftone screen that looks and feels like a newspaper.
- **User Defined Screen 1/2/3:** Applies a user-defined halftone screen based on the settings in Color Setup in Command WorkStation.

NOTE: Use Newsprint and User Defined Screen 1/2/3 with all applications, including Microsoft Office.

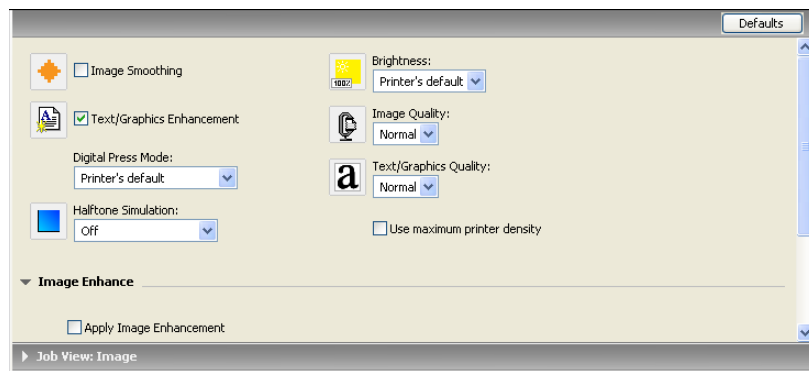
Printing with pre-defined halftone screens

Use the following procedure to print a job with a pre-defined default halftone screen from the printer driver.

TO PRINT A JOB WITH A DEFAULT HALFTONE SCREEN

- 1 **Choose Print from your application.**
- 2 **Select EX Print Server as your printer and click Properties.**

The Properties dialog box appears with the Fiery Printing tab selected.
- 3 **Click the Image icon.**
- 4 **Select a pre-defined halftone screen from the Halftone Simulation list.**



For more information, see [page 31](#).

- 5 **Click OK to close the Properties dialog box.**
- 6 **Click Print.**

The job is printed to the EX Print Server with the pre-defined halftone screen.

Setting up custom Halftone Simulation



In Command WorkStation, the Halftone Simulation feature is in the Halftone Simulation tab under the Color Setup tab in Device Center. For more information about setting up custom Halftone Simulation screens, see Command WorkStation Help.

Settings for 'user defined' halftone screens are applied when enabled for a job.

Screen	Color	Angle (degrees)	Frequency (LPI)
Screen 1	Cyan	15	85
	Magenta	75	85
	Yellow	0	85
	Black	45	85
Screen 2	Cyan	15	105
	Magenta	75	105
	Yellow	0	105
	Black	45	105
Screen 3	Cyan	15	120
	Magenta	75	120
	Yellow	0	120
	Black	45	120

Dot Shape: Round

Factory defaults Reset Apply

Printing with custom halftone screens

After specifying the halftone screen values for User Screen 1, User Screen 2, or User Screen 3, select a corresponding custom screen name from the printer driver. Use the same procedure on [page 32](#) to print a job with a custom halftone screen.

NOTE: Alternatively, you can send a job with a default halftone screen and change the print option setting using Command WorkStation Job Properties.

The printed job reflects the settings you defined on the Halftone Simulation pane.

Supported applications

The following applications have been tested with Mac OS and Windows for compatibility with the Application Defined setting in the Halftone Simulation print option. Other applications should work as well, as long as they are using standard PostScript conversions on halftone screen definitions and the parameters used in the definitions are kept within the physical limitations of the digital press.

- Adobe Acrobat
- Adobe Illustrator
- Adobe InDesign
- Adobe PageMaker
- Adobe FreeHand
- QuarkXPress

Calibrating for custom halftone screens

When color quality is important, make sure that the EX Print Server is calibrated for the particular halftone screen that you use. Changing a halftone screen usually modifies the color response of the digital press.

The best color is achieved when an output profile that is associated with the appropriate calibration response is selected at print time. However, when custom halftones are specified, the EX Print Server does not have adequate information about the resulting color response. For this reason, achieving good color with custom halftone screens is often possible only when you perform custom halftone calibration and use a profile based on this custom halftone.

Use the following procedure to calibrate the EX Print Server for custom halftone screens.

TO CALIBRATE THE EX PRINT SERVER FOR CUSTOM HALFTONE SCREENS

- 1 Prepare the measurement instrument that you use for calibration.**
- 2 On the User Software DVD, open the folder that contains the custom halftone calibration files.**

The folder locations for Mac OS and Windows are as follows:

Mac OS: Mac Color Files:Calibration Files:Halftone Calibration Files:Photoshop or Other Applications

Windows: Windows Color Files\Calibration Files\Halftone Calibration Files\Photoshop or Other Applications

The folder contains images of the measurement pages for various instruments and page sizes. If you print halftone screens only from Adobe Photoshop, open the Photoshop folder. Otherwise, open the Other Applications folder.

NOTE: When opening or printing these files, do not “color-manage” using PostScript Color Management or ICC profiles that provide color conversions.

- 3 From Photoshop, open the image file that corresponds to your instrument and page size. From other applications, open a blank document and place the EPS file that matches your instrument and page size.**

The images were prepared for the final sheet page size. If you are placing an image, do so using no margins. Ignore warnings that the image may be clipped.

NOTE: If you use these measurement pages with the EX Print Server standard halftone screens, make sure to set the print option that controls the screen.

4 Print the measurement page using your custom halftone and other print option settings.

This page is now the custom calibration measurement page.

You must print this measurement page with the CMYK/Grayscale Source print option set to ColorWise OFF, which prints the page without calibration.

NOTE: To calibrate your digital press, you must print CMYK patches in the raw state of the digital press. Except for the Output Profile print option, the ColorWise print options are irrelevant and will be ignored. Use the Output Profile setting that corresponds to the type of paper you are using.



To increase the speed and reliability of the calibration, print your measurement page, with the appropriate print option settings, to a PostScript file. The next time you calibrate, download this PostScript file. Retaining this file in the Hold queue of the EX Print Server makes the calibration process faster.

5 Use the Calibrate feature in Command WorkStation to perform the calibration.

NOTE: Do not use the Print button to generate the measurement page. Use the measurement page that you printed in [step 4](#).

For information about calibration, see [Color Printing](#).

SOFT PROOFING

The Soft Proofing feature allows you to view accurate color previews of print jobs on a monitor. Use soft proofs to preview colors as they will appear when the job is printed.

You access Soft Proofing through the Preview window in Command WorkStation.

The Soft Proofing feature applies a specified color profile to the preview of a job to compensate for the unique display characteristics of your monitor. As a result, the preview provides a more accurate representation of how the job will appear when printed.



For information about using Soft Proofing, see Command WorkStation Help.

IMAGEVIEWER

ImageViewer allows you to soft proof and adjust colors in a job before it is printed. You can use the preview in ImageViewer to verify job placement, orientation, and content, as well as general color accuracy. If the job contains halftone screened settings, the preview shows a composite view of all separations at the dot level. You can select to display the plate data for each process color independently or in combination with the other colors, allowing inspection of individual plate data or a combination of any range of plates.

Accessing ImageViewer

Start ImageViewer from the Actions menu or Preview window of Command WorkStation.

TO START IMAGEVIEWER FROM THE ACTIONS MENU

- 1 In Job Center in Command WorkStation, select the job that you want to preview.

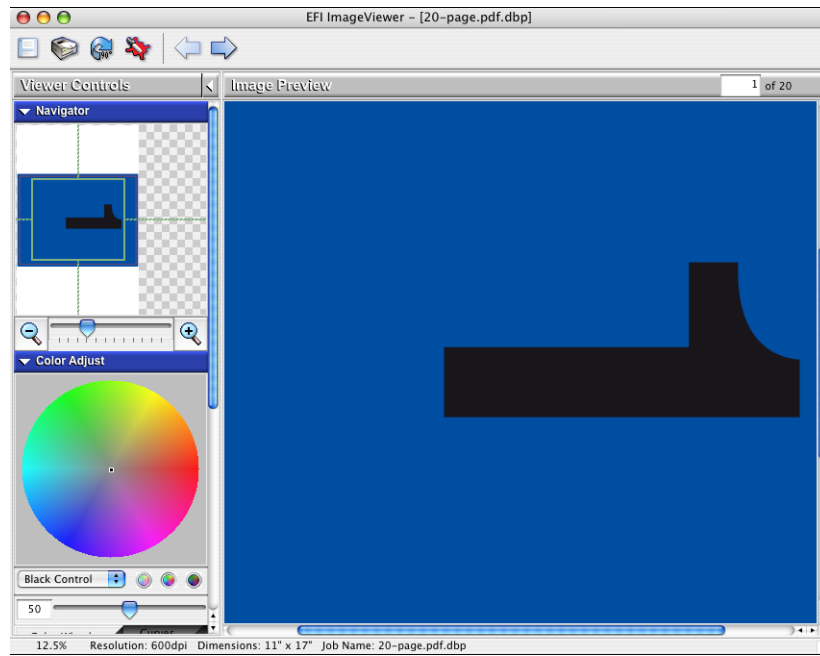
NOTE: ImageViewer recognizes only jobs that show processed/held (dark yellow) status. Processed/held jobs are also indicated by the raster job icon (page icon ringed with a halo).

- 2 If needed, choose **Process** and **Hold** from the Actions menu to move the job to processed/ held status.

3 To start ImageViewer, do one of the following:

- Choose ImageViewer from the Actions menu.
- Right-click the selected job and choose ImageViewer from the menu that appears.

The ImageViewer main window appears.



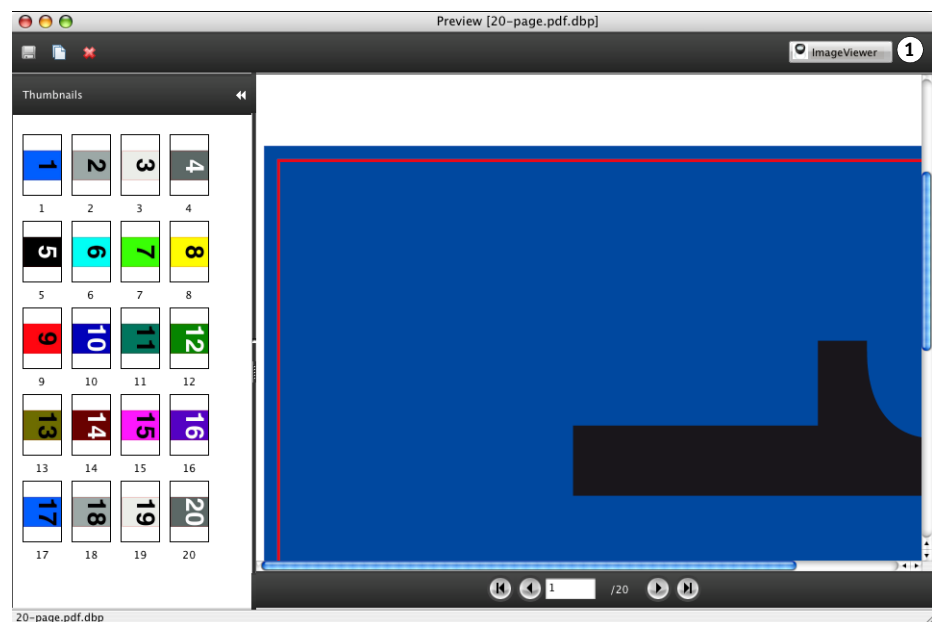
TO START IMAGEVIEWER FROM THE PREVIEW WINDOW

- 1 In Job Center in Command WorkStation, select the job that you want to preview.

NOTE: ImageViewer recognizes only jobs that show processed/held (dark yellow) status.

- 2 If needed, choose Process and Hold from the Actions menu to move the job to processed/held status.
- 3 Choose Preview from the Actions menu.

Page thumbnails appear in the Preview window.

1 ImageViewer button

- 4 To start ImageViewer, select the thumbnail of the page that you want to soft proof and click ImageViewer.

The ImageViewer main window appears.

For information about using ImageViewer, see Command WorkStation Help.



PREFLIGHT

The Preflight feature performs a simple check of the most common areas of error to ensure that the job will print successfully and to the expected quality on the selected printing device.

The categories of errors that Preflight checks are:

- Fonts
- Spot Colors
- Image Resolution
- VDP Resources
- Hairlines
- Overprint
- PostScript



This feature is accessible from Command WorkStation. For more information about Preflight, see Command WorkStation Help.

NOTE: In addition to the file formats listed in Command WorkStation Help, the VIPP file format is supported for Preflight.

HOT FOLDERS FILTERS

This chapter describes the Hot Folders filters that convert various files to PostScript or PDF (Portable Document Format), or preflight certain files. Some of these filters are included in Fiery Graphic Arts Package, Premium Edition and are available if Fiery Graphic Arts Package, Premium Edition is enabled.

Hot Folders filters allow you to convert certain file formats to PostScript or PDF or to preflight files for conformity. File conversion and preflighting take place on your computer in the Hot Folders application, which saves EX Print Server resources. You can print files directly from Hot Folders filters without starting the application from which they were created.

The filters included with Fiery Graphic Arts Package, Premium Edition are:

- General
 - EPS
 - JPEG
 - PDF
 - TIFF
- Color Separated
 - DCS
 - TIFF/IT-P1
- Special
 - CT/LW
 - ExportPS
 - PDF2Go



For information about using the filters in the Hot Folders application, see Hot Folders Help.

For information about operating systems that support Hot Folders, see [Welcome](#).

For information about installing the Hot Folders application, see [Utilities](#).

POSTFLIGHT

The Postflight feature helps you determine why some printed jobs may not deliver expected color. Acting as a diagnostic and training tool for all users, it provides helpful global and object-specific information about how a job is actually received and processed by the EX Print Server.

Use Postflight to troubleshoot color problems with a previously printed job or as a preventive measure. You can print the original document (or RIPped and previewed) with all objects (images, graphics, and text) color-coded. A report explains what color spaces are used in the job and what print options affect those spaces. The report also provides information about the printing environment, such as calibration date, time, and method. Print a Test Page to verify the condition of the printing environment.

Postflight is a powerful analysis tool that enumerates in its reports not only those color spaces that are used by visible objects, but any color space called by a job. This can be very useful in diagnosing puzzling situations that may require correction. For example: using one specific combination of a printer driver, an OS, and a desktop publishing application emitting separations for plates, you *might* find that: 1) the Postflight color-coded pages show the Cyan, Magenta, and Yellow separations in the “DeviceGray” color space, while the Black separation is shown in the “DeviceCMYK” color space and 2) the Postflight report enumerates: DeviceGray, DeviceCMYK and DeviceRGB. What once required a PostScript expert to decipher can now be interpreted in minutes using Postflight reports. The Cyan, Magenta, and Yellow pages are defined in “DeviceGray”, the Black page is using the “K” channel of DeviceCMYK, and the job is calling for the RGB color space, without applying it on any user-visible object.

About Postflight

When the Postflight print option is set to values other than Off, it provides the following information to help you identify possible problems: Postflight Test Page, Postflight color-coded pages, and Postflight reports.

Postflight Test Page

You can print the Postflight Test Page alone or in combination with the color-coded pages. The Test Page is printed using the exact same media and global settings (such as calibration) as your job. However, color objects on this page are printed independently of the user-specified source color definitions (such as CMYK simulation and RGB).

If the color on this page is not accurate, the problem lies with the printing environment (such as the calibration, output profile, or print device).

If the color on this page prints correctly but objects in your job do not print in expected colors, it is likely that the problem lies with the color setting specific to these objects. Problems with objects can be: wrong color values for text and graphics, bad quality images, or out-of-gamut colors.

Postflight color-coded pages

With this option, Postflight prepares a color-coded version of the original document that displays each object with a color corresponding to the color space that the EX Print Server received for the object.

The colors used to represent the color spaces for objects are as follows:

- Gray objects: Gray
- CMYK objects: Cyan
- RGB objects: Red
- Device-Independent objects: Indigo
- Spot color objects: Yellow

By reviewing the colors for all objects, you can identify the print option settings that affect the color conversion of the objects and make appropriate modifications.

Postflight reports

You can print reports on color-coded pages, either alone or combined with the color-coded document. These reports are printed on the EX Print Server default paper size (Letter for US, A4 for metric) and use the default calibrated color mode.

The reports provide a document header with information (such as job name, date and time printed, and user name), a ColorWise global settings page, and object-specific settings pages. All pages include the job name, postflight date/time, and pagination in the bottom margin.

- **ColorWise global settings page** provides information that affects every object in a job, such as Calibration Set, the date the EX Print Server was calibrated, the method used for calibration, and the output profile that was used.
- **Object-specific settings pages** provide a list of the settings that were used to process every object in each color space, thus suggesting the locations to correct problems. For example, if you see a problem with an object that is displayed in Cyan in a color-coded page, review the settings listed in the CMYK Objects page and try changing those settings.
- **Spot colors page** lists all spot colors.

For spot colors, the Postflight report lists the colors that are used in a job. It also indicates whether these colors are defined in the EX Print Server. When a spot color is defined in the EX Print Server, a patch is printed next to the color name. When a color is not defined in the EX Print Server, a white patch with an X is printed.

Important notes on Postflight reports

The main purpose of Postflight is to help you detect, diagnose, and prevent color-related problems. In contrast to generic preflight software, which attempts to predict how a job would be processed, a postflighted job is fully processed by the EX Print Server, allowing accurate reporting on the settings with which the job processed.

This Postflight feature is especially useful in cases where a workflow that was used to submit a job inadvertently converts colors. This conversion occurs with some printer drivers, printing options, and conversions to PDF.

This report focuses on color processing and does not list every printing option that affects your job. For more information about the ColorWise print options, see [Color Printing](#).

NOTE: Postflight reports list only those color spaces that were submitted to the EX Print Server with your job. You may occasionally find that a job produces a Postflight report that includes information about color spaces that you cannot locate in the job's color-coded pages. This occurs when an object in the color space is used in the job but is masked by another object, when an object is very light (for example, 0% of a spot color), or when the specific application or printer driver asks the EX Print Server to process a particular color space but does not use it for user-visible objects.

NOTE: A Postflight report contains only one page on global settings, and it can include only one Test Page. Therefore, Postflight cannot describe an entire job accurately unless all pages are printed with the same options and on the same media. This is the case, for instance, with Mixed Media jobs, because they can use multiple output profiles, up to one profile per media in the job. If the page range is set to the pages that use one media only, Postflight produces reliable results for the specified range.

NOTE: Postflight is a “reporting” feature that is designed for diagnostic purposes. It is not designed for use with production features such as VDP and Imposition. For high-volume applications in production environments, use Postflight only on the individual pages that need testing.

Postflight print option

Access the Postflight feature through the Postflight print option. The following values are available for the Postflight print option:

- Off (Default)
- Concise Report
- Test Page
- Color-Coded Pages
- All Components (Color-Coded document pages, Test Page, and Concise Report)

NOTE: Select a portion of a job to print the Postflight pages by selecting the appropriate page range of a job from the printer driver.

Postflight workflow

The default settings in the ColorWise print options are such that in most cases you should not have to change them. However, there may be times when you receive unexpected colors for your job. Postflight is a procedure performed after you print a document and receive unexpected or inadequate color. If you have access to Command WorkStation, Postflight also helps you catch color problems before you actually print. Postflight processes your job and collects information about the color objects throughout. The information is then displayed in Color-Coded document pages, a Test Page, and a Concise Report.

NOTE: The background defined in the Paper Simulation is not indicated as a CMYK object in the Postflight reports. For more information about Paper Simulation, see [page 13](#).

NOTE: You cannot use Postflight at the same time that you use the following features: Progressives, Substitute Colors, or Combine Separations. Constraints are set for these print options from the printer driver.

The following scenarios show how Postflight can be helpful to users who demand high-quality color.

To diagnose an unexpected color (see [page 49](#))

Use Postflight to diagnose unexpected color in a job, or determine which print or calibration settings apply to a job.

To check the calibration status prior to printing a job (see [page 51](#))

Consider the following before printing a job:

- The EX Print Server may include many Calibration Sets. Which Calibration Set applies to my job?
- When was the EX Print Server last calibrated?
- Which instrument was used for the last calibration?

To check the quality of the output profile (see [page 52](#))

If you are considering using a new paper for which you do not have a custom profile, or if you suspect that the output profile for your print device may not precisely describe its color behavior, check your output profile by printing the Postflight Test Page.

To diagnose a color problem of a specific object (see [page 53](#))

When experts have verified that the calibration is correct and that the global settings, including the output profile, are correct, but the color of a specific object is still not as intended, you can print a color-coded document and diagnose the problem.

The detailed procedures of these scenarios are described in the following sections.

NOTE: For each of the following procedures, instead of printing the report to the EX Print Server, you can also send it to the Hold queue of the EX Print Server and preview the information (of a job with raster data) in ImageViewer. For more information about ImageViewer, see [ImageViewer](#). To view the color of a job correctly, you must set your monitor and monitor profile correctly. For more information about the monitor and monitor profiles, see [page 12](#).

NOTE: The procedures for printing a job from a Windows and a Mac OS computer are similar.

Scenario 1: Diagnose an unexpected color

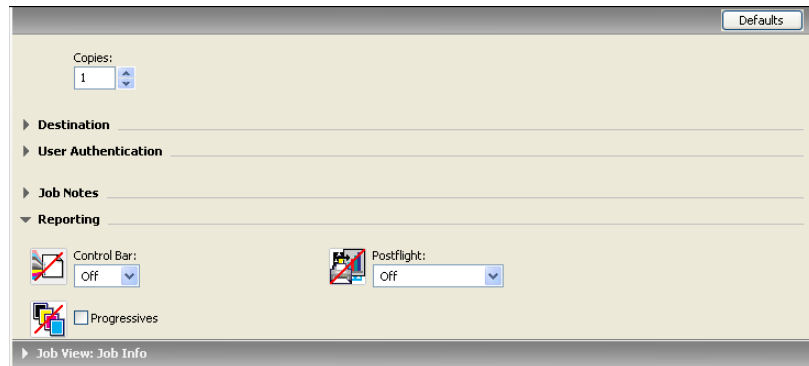
Use the following procedure to print a job with Postflight set to Off.

TO PRINT A JOB

- 1 **Open a job from your application.**
- 2 **Choose Print.**
- 3 **Select EX Print Server as your printer and click Properties.**

The Properties dialog box appears with the Fiery Printing tab selected.

- 4 **Click each option icon, and specify the values for each print option.**
- 5 **Click the Job Info icon.**
- 6 **Choose Off from the Postflight menu.**



- 7 **Click OK to close the Properties dialog box.**
- 8 **Click Print.**

The job is printed to the EX Print Server.

After you print a job, use the following procedure to diagnose an unexpected color and print the job with edited color settings.

TO DIAGNOSE AN UNEXPECTED COLOR AND PRINT WITH EDITED COLOR SETTINGS**1 Click the Job Info icon.****2 Choose All Components from the Postflight menu.**

For information about the components of Postflight, see [page 44](#).

3 Click OK to close the Properties dialog box.**4 Click Print.**

Postflight Test Page, color-coded document pages, and Postflight Reports are printed.

5 Review all Postflight pages.

For information about the Postflight pages, see [page 44](#).

6 Make appropriate changes based on all Postflight pages.

For more information about the changes, see the following section.

7 Choose Off from the Postflight menu.**8 Click OK.****9 Click Print.**

The job with the edited color settings is printed to the EX Print Server.

10 Return to Step 1, if needed.

Repeat the steps until you get satisfactory color results.

Making changes

After reviewing the Postflight information, determine what changes are necessary and apply the changes. Depending on your printing environment, the condition of the print device, and the color settings, possible changes are as follows:

- Correct problems with the print device (see the documentation that accompanies the print device).
- Calibrate the EX Print Server (see [Color Printing](#)).
- Edit the colors of the output profile with Command WorkStation (see Command WorkStation Help).
- Change the default settings in Command WorkStation (see Command WorkStation Help).
- Change the job specific print option settings using Command WorkStation Job Properties.

Scenario 2: Check the calibration status

Use the following procedure to check the calibration status prior to printing a job.

TO CHECK THE CALIBRATION STATUS AND PRINT WITH THE OPTIMUM CALIBRATION CONDITION

- 1 **Click the Job Info icon.**
- 2 **Choose Concise Report from the Postflight menu.**

For information about Postflight reports, see [page 45](#).

- 3 **Click OK.**
- 4 **Click Print.**

The Concise Report page is printed.

- 5 **Review the information in the ColorWise global settings page.**
- 6 **Perform calibration, if needed.**

If service has been performed on the print device since the last calibration, or calibration has not been performed, perform calibration using the Calibration Set specified in the Postflight report.

For more information about calibration, see [Color Printing](#).

- 7 **Choose Off from the Postflight menu.**
- 8 **Click OK.**
- 9 **Click Print.**
- 10 **The job is printed to the newly calibrated EX Print Server.**

Scenario 3: Check the quality of the output profile

Use the following procedure to check the quality of the output profile of the print device.

TO CHECK THE QUALITY OF OUTPUT PROFILE AND PRINT WITH THE OPTIMUM OUTPUT PROFILE

- 1 Click the Job Info icon.**
- 2 Choose Test Page from the Postflight menu.**

For information about the Postflight Test Page, see [page 44](#).

- 3 Click OK.**
- 4 Click Print.**

The Postflight Test Page is printed to the EX Print Server.

- 5 Review the quality of the color on the Postflight Test Page.**

NOTE: Make sure that this page was printed with the same media and print option settings as the job.

- 6 Review the instructions on the Postflight Test Page.**
- 7 Edit the color of the output profile, or create a profile, if needed.**

It may be necessary to customize the output profile or create one to get optimal results on the media the job is using.

- 8 Choose Off from the Postflight menu.**
- 9 Click OK.**
- 10 Click Print.**

The job is printed to the EX Print Server with the edited or newly created output profile.

Scenario 4: Diagnose a color problem of a specific object

Use the following procedure to diagnose a color problem.

TO DIAGNOSE A COLOR PROBLEM OF A SPECIFIC OBJECT AND PRINT WITH THE EDITED COLOR SETTINGS

- 1 **Click the Job Info icon.**
- 2 **Choose Color-Coded Pages from the Postflight menu.**

For information about Postflight color-coded pages, see [page 44](#).

- 3 **Click OK.**
- 4 **Click Print.**

Postflight color-coded pages are printed to the EX Print Server.

NOTE: Alternatively, you can send the Postflight color-coded pages to the Hold queue of the EX Print Server and preview them using ImageViewer. To preview the pages using ImageViewer, make sure that your monitor is set up according to the manufacturer's recommendations and that the correct monitor profile is specified for your monitor. For information about monitor profiles, see [page 12](#).

- 5 **Review the Postflight color-coded pages.**
- 6 **Make changes to the color settings, if needed.**

For information about the ColorWise print options for various color spaces, see [Color Printing](#).

NOTE: Use the Color-Coded Pages Only setting to send a job to another print device that has a specific color-space requirement. For example, a document targeted to a CMYK-only press must have only Cyan-colored objects.

- 7 **Choose Off from the Postflight menu.**
- 8 **Click OK.**
- 9 **Click Print.**

The job is printed to the EX Print Server with the edited color settings.

MULTIPLE PLATE SEPARATIONS

The Multiple Plate Separations feature allows you to combine the multiple pre-separated color plates of a PostScript job into a composite color print. It supports: Cyan, Magenta, Yellow, Black, and one or more spot colors.

The results of combining the multiple plates are predictable and accurate, regardless of the original application used. This feature also fully supports DCS 2.0 file formats when included in a PostScript print job from a page layout application.

Multiple plate separations workflow

Use the following procedure to print a composite color print from the printer driver.

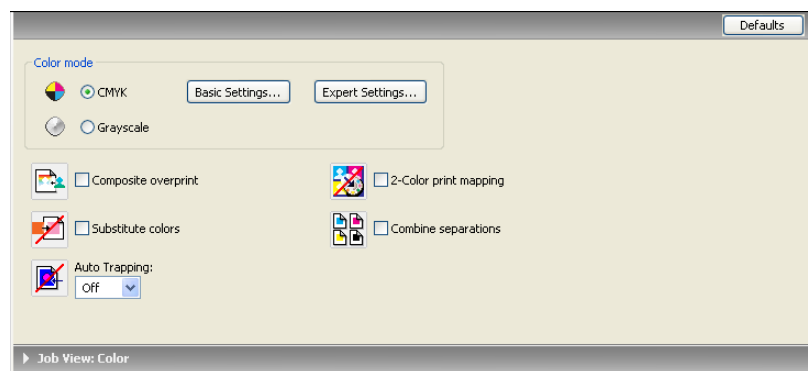
NOTE: The procedures for printing a composite color print from a Windows and a Mac OS computer are similar.

TO PRINT A COMPOSITE COLOR PRINT

- 1 **Open a color-separated document in a supported application.**
- 2 **Choose Print.**
- 3 **Select EX Print Server as your printer and click Properties.**

The Properties dialog box appears with the Fiery Printing tab selected.

- 4 **Click the Color icon.**



- 5 **Select Combine Separations.**
- 6 **Click OK, and then click Print.**

A composite color print is printed to the EX Print Server.

Combine Separations print option

Access the Multiple Plates Separations feature through the Combine Separations print option from the printer driver.

The following values are available for the Combine Separations print option:

- Off (Default)
- On

Supported applications

The following applications have been tested with Mac OS and Windows for compatibility with the Multiple Plates Separations feature:

- Adobe Illustrator
- Adobe InDesign
- Adobe PageMaker
- Adobe FreeHand
- QuarkXPress

PAPER SIMULATION

The Paper Simulation feature gives you the benefit of the absolute colorimetric rendering that renders the white point of the source color space as a visible color in the output profile color space.

Paper Simulation workflow

Use the following procedure to print a job with the fixed Paper Simulation feature On.

NOTE: The procedures for setting the Paper Simulation print option from a Windows and a Mac OS computer are similar.

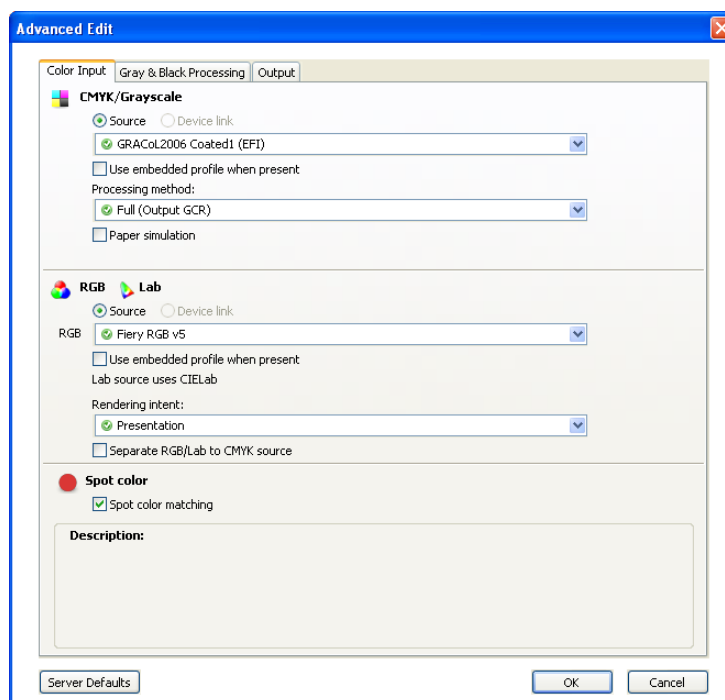
TO PRINT WITH THE FIXED PAPER SIMULATION FEATURE ON

- 1 Choose Print from an application.
- 2 Select EX Print Server as your printer and click Properties.

The Properties dialog box appears with the Fiery Printing tab selected.

- 3 Click the Color icon, and then click Expert Settings.

The Advanced Edit dialog box appears.



4 **Select Paper Simulation and click OK.**

5 **Click OK, and then click Print.**

The job is printed with the fixed Paper Simulation feature.

Paper Simulation print option

Turn the Paper Simulation feature on or off through the print option from the printer driver.

- **On:** Performs Absolute Colorimetric rendering.
- **Off (Default):** Performs Relative Colorimetric rendering.

UGRA/FOGRA MEDIA WEDGE

Ugra (the Graphic Technology Research Association of Switzerland) and FOGRA (the Graphic Technology Research Association of Germany) are organizations that support standardization and quality control. Together, they developed the Ugra/FOGRA Media Wedge CMYK v2.0, a control device used to evaluate hard copy proofs. One version of the the Ugra/FOGRA Media Wedge, which is supported by the EX Print Server with Fiery Graphic Arts Package, Premium Edition enabled, is customized for the ES-1000 spectrophotometer.

The Ugra/FOGRA Media Wedge, as printed on the EX Print Server, includes the standard color patches as well as the digital press resolution, EX Print Server model name, and other static information required by Ugra/FOGRA.



Adding the Ugra/FOGRA Media Wedge to any job allows you to check the color accuracy and consistency of the digital press by measuring the colors in the Ugra/FOGRA Media Wedge with the ES-1000 and supporting software, and comparing the measurements to reference values.

Printing the Ugra/FOGRA Media Wedge

There are two ways to include the Ugra/FOGRA Media Wedge in a job:

- By incorporating the Ugra FOGRA-MediaWedge V2.2x.EPS file in the source document. This file is available on the User Software DVD, in the Color Bars folder inside the Windows Color Files folder or Mac Color Files folder.
- By enabling the Control Bar print option. The Ugra/FOGRA Media Wedge is the default Control Bar image.

For more information about the Control Bar print option, see [“Control Bar”](#) on page 21.

NOTE: This version of the Ugra/FOGRA Media Wedge is different from the Ugra/FOGRA Media Wedge used in the Integrated Altona Visual Test. For more information about the Integrated Altona Visual Test, see [Integrated Altona Visual Test](#).

The Ugra FOGRA-MediaWedge V2.2x.EPS file is not an ordinary EPS file. Printing this file is supported only on a EX Print Server with the Fiery Graphic Arts Package, Premium Edition enabled. The file will not print if modified and saved as another version. You cannot currently use Compose, Impose, or QDM to embed the Ugra/FOGRA Media Wedge image in a PDF file.

Reading the Ugra/FOGRA Media Wedge

This version of the Ugra/FOGRA Media Wedge is optimized for the ES-1000. Other strip-reading or spot-reading spectrophotometers may be used, if supported by their applications. EFI Color Verifier (part of Fiery Color Profiler Suite) is the quality control application officially supported to measure the Ugra/FOGRA Media Wedge as printed by the EX Print Server.

Reference measurements are not supplied with the Ugra/FOGRA Media Wedge. With the appropriate software, such as Fiery Color Profiler Suite, you can create your own reference measurements, extract them from reference ICC profiles, or load them from standards.

Using the Ugra/FOGRA Media Wedge for quality control

You can use the Ugra/FOGRA Media Wedge to compare digital proofs with print standards, print runs with print standards, and digital proofs with print runs. It was originally designed to check the accuracy and consistency of CMYK values when compared to the international ISO 12642 standard, but this is not its exclusive usage: when the Ugra/FOGRA Media Wedge is printed in a job, you can measure the color accuracy and consistency of the output device for any printing condition, whether CMYK simulation or device CMYK color.

INTEGRATED ALTONA VISUAL TEST

The Altona Test Suite is a project of the European Color Initiative (ECI). The test suite is suited for evaluating RIPs as well as other components in composite PDF workflows for print proofing or print production. Even if you are not yet using PDF/X3, you can use the Altona Test Suite to identify the weaknesses and limitations of a PDF workflow.

The Integrated Altona Visual Test feature of the Fiery Graphic Arts Package, Premium Edition allows you to verify the level of PDF/X support provided by the software and hardware used in a composite PDF workflow. You perform this test by printing the free version of the Altona Visual Test document on the EX Print Server using the PDF workflow you want to verify. The EX Print Server adds information to the printed output that can be used to determine:

- If the workflow used to send PDF documents to the EX Print Server is PDF/X compatible.
- If a PDF/X workflow is compatible with the limited interpretation of PDF/X by Altona.
- If the color quality of a PDF/X workflow meets a standard.

The Integrated Altona Visual Test simplifies the setup and verification of PDF workflows. You can verify Altona PDF/X compliance without having to purchase the Altona Test Suite Application Kit.

Altona Visual Test file

You can obtain the free version of the Altona Visual Test file that you need for the Integrated Altona Visual Test at the ECI website (www.eci.org). Go to the Downloads area and download `altona_visual_1v2a_x3.pdf`.

This PDF file must be imported to the EX Print Server using Command WorkStation or Hot Folders, not printed through the printer driver. The printer driver converts a PDF file to PostScript, and therefore some PDF/X embedded information is lost. A PDF/X workflow cannot include printing through a printer driver.

For PDF/X compliance as tested by Altona, set the following settings for the Altona Visual Test job in Command WorkStation Job Properties:

Print option	Setting	Location in Job Properties
PDF/X Output Intent	Enabled	Expert Color Settings (in Color)
Composite Overprint	Enabled	Color
Use Embedded Profile When Present (RGB)	Enabled	Expert Color Settings (in Color)
Separate RGB/Lab to CMYK Source	Enabled	Expert Color Settings (in Color)
Scale	100% (no scaling)	Layout

Scaling the Altona Visual Test file and any file designed with resolution-dependent objects often leads to artifacts such as moirés.

For more information about these print options, except for Scale, see [Color Printing](#). For more information about Scale, see [Printing](#).

If you use all of these settings, the Altona Visual Test File output will indicate PDF/X compliance as tested by Altona.

Interpreting test results

The Altona Visual Test file produces the printed page shown below. The EX Print Server inserts the test results in the lower left area.

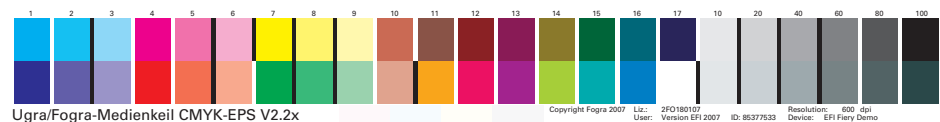
1 Test result area



The following table indicates how to read the test results:

Test result	Indicates
Blank	File printed to a EX Print Server without the Integrated Altona Visual Test feature or workflow is not PDF/X compatible.
A message indicating that the test file was not processed with optimal settings for Altona	Workflow is not compatible with PDF/X as tested by Altona.
Ugra/FOGRA Media Wedge (a standard set of color bars)	Workflow is compatible with PDF/X as tested by Altona.

If the Ugra/FOGRA Media Wedge, shown in the figure below, is printed in the test result area, the workflow is PDF/X compatible for Altona testing. It is therefore correct to visually and colorimetrically inspect the page. If you have a spectrophotometer, such as the ES-1000, and quality control software, such as EFI Color Verifier, you can proceed with measurements to evaluate the degree of color matching. The version of the Ugra/FOGRA Media Wedge inserted by the EX Print Server is scaled and positioned for easy reading by a strip-reading instrument.



NOTE: Be sure to use the free version of the Altona Visual Test file, not the purchased one. The purchased version always includes a version of the Ugra/FOGRA Media Wedge in the bottom left area, whether the workflow is valid or not. In addition, the version of the Ugra/FOGRA Media Wedge printed by the purchased version cannot be read conveniently by a strip-reading instrument.

The Integrated Altona Visual Test confirms if your workflow maintains PDF integrity and if it produces valid output that can be used for further analysis and interpretation. To formally determine the level of PDF/X compliance, refer to Adobe published documentation. For information on how to interpret printed Altona pages, refer to the documentation available from the European Color Initiative (ECI).

For information on the Ugra/FOGRA Media Wedge and how to use it for quality control in user designed workflows, see [Ugra/FOGRA Media Wedge](#).

Using a PDF/X workflow not compatible with Altona

If text appears in the test result area instead of the Ugra/FOGRA Media Wedge, you cannot use the page for further Altona testing because the workflow is not PDF/X compatible as tested by Altona. However, the EX Print Server is not limited to the Altona interpretation of PDF/X. In particular, if you are using the EX Print Server for production printing rather than proofing, you might choose job settings that are not PDF/X compatible as tested by Altona. For example, you might choose to:

- Disable the Separate RGB/Lab to CMYK Source option in production PDF/X workflows, to exploit the maximum gamut of the digital press.
- Scale down the document to increase margins or scale it up to reduce margins.
- Use EX Print Server-specific options, such as Image Smoothing, that would alter the images in the Altona Visual Test file but would enhance your production output.

To get the best possible output from the Altona Test Suite, refer to the information about the Altona Visual Test File at

<http://www.efi.com/support/production/fiery/production/how-to/sys8/>

Altona helps verify PDF/X compliance, with some bias towards ISO color standards. We recommend that you do not limit yourself to ISO color. PDF/X lets you define your own color spaces and take advantage of the wider color gamut often possible with digital printers.

For more information about PDF/X and how to create compliant documents, refer to documents and information available from Adobe.

INDEX

A

- Altona 58
- Auto Trapping
 - about 25
 - configurable 25
 - configuring 27
 - default 26
 - printing 27
 - workflow 25

C

- color accuracy 58
- color consistency 58
- colors, proofing 37, 38
- Combine Separations
 - print option 55
- Command WorkStation
 - Auto Trapping configuration 27
 - Control Bar feature 24
 - halftone calibration 36
 - Halftone Simulation feature 33
 - Paper Simulation white point editing 14
 - Progressives feature 30
 - Two-Color Print Mapping definition 18
- Control Bar
 - about 21
 - custom 24
 - default control bar 22
 - print option 22
 - printing 24
 - workflow 22
- custom Control Bar 24

E

- EFI Color Verifier 59, 62

F

- Fiery Color Profiler Suite 59
- FOGRA 58

G

- graphic arts features 9

H

- halftone calibration files 35
- Halftone Simulation
 - Application Defined 31
 - calibrating 34
 - customizing 33
 - Newsprint 31
 - print option 31
 - printing 32, 33
 - User Defined Screen 31
 - workflow 31
- Hot Folders filters 42

I

- ImageViewer, accessing 38
- Integrated Altona Visual Test
 - 58, 60

J

- jobs, viewing soft proof of 37, 38

M

- monitor profile, specifying 12
- monitor, setting up 12
- Multiple plate separations
 - workflow 54

O

- output profile
 - Paper Simulation 14, 16, 56
 - Postflight 48, 50, 52
 - Spot-On 19

P

- Paper Simulation
 - fixed values 13, 56
 - Full (Output GCR) 16
 - print option 14, 57
 - printing 15, 56
 - white point editing 14
 - workflow 13, 56
- PDF/X compatibility 60

PDF/X Output Intent 61

Postflight

- about 44
- accurate reporting 46
- calibration status 48, 51
- color problems 48, 53
- color-coded pages 44, 53
- ColorWise global settings page 45
- ColorWise print options 46
- Concise Report 51
- global settings page 51
- Hold queue 53
- ImageViewer 53
- information 50
- making changes 50
- monitor profile 53
- Object-specific settings pages 45
- Paper Simulation 47
- print option 47
- quality of output profile 48, 52
- Spot colors 45
- Test Page 44, 52
- unexpected colors 48, 49
- vs. Combine Separations 47
- vs. Progressives 47
- vs. Substitute Colors 47
- workflow 47

Progressives

- configuring 30
- default 29
- print option 29
- printing 30
- workflow 28

proofing colors 37, 38

S

Soft Proofing 37

spectrophotometer 58, 62

T

terminology 7

Two-Color Print Mapping

- defining 18
- printing 19

U

Ugra/FOGRA Media Wedge 58, 62